

Voltage Transducer

Applications

For the electronic measurement of voltages: AC, DC IMPL., etc., with galvanic isolation between the primary (high power) and the secondary (electronic) circuits.



Advantages	Applications	Standards
Excellent accuracy	AC variable speed drives	EN50178
Very good linearity	Battery supplied applications	EN50155
	converter /inverter	
	UPS/SVG	

Main electrical data		
I_{PN} (mA)	Primary nominal current rms	10mA
I_p (mA)	Primary current measuring range	0~±14mA
	Conversion ratio	2500: 1000
V_C (V)	Supply voltage	±15×(1±5%)V
I_{SN} (mA)	Secondary nominal current rms	25mA
R_M (Ω)	Measuring resistance	@10mA: 100Ω ~340Ω @14mA: 100Ω ~180Ω
I_c (@±15V)	Current consumption	≤10mA+ Secondary output current I_{SN}
	Isolation test: Between the primary circuit to the secondary circuit	4.2 kVrms/50Hz/1min

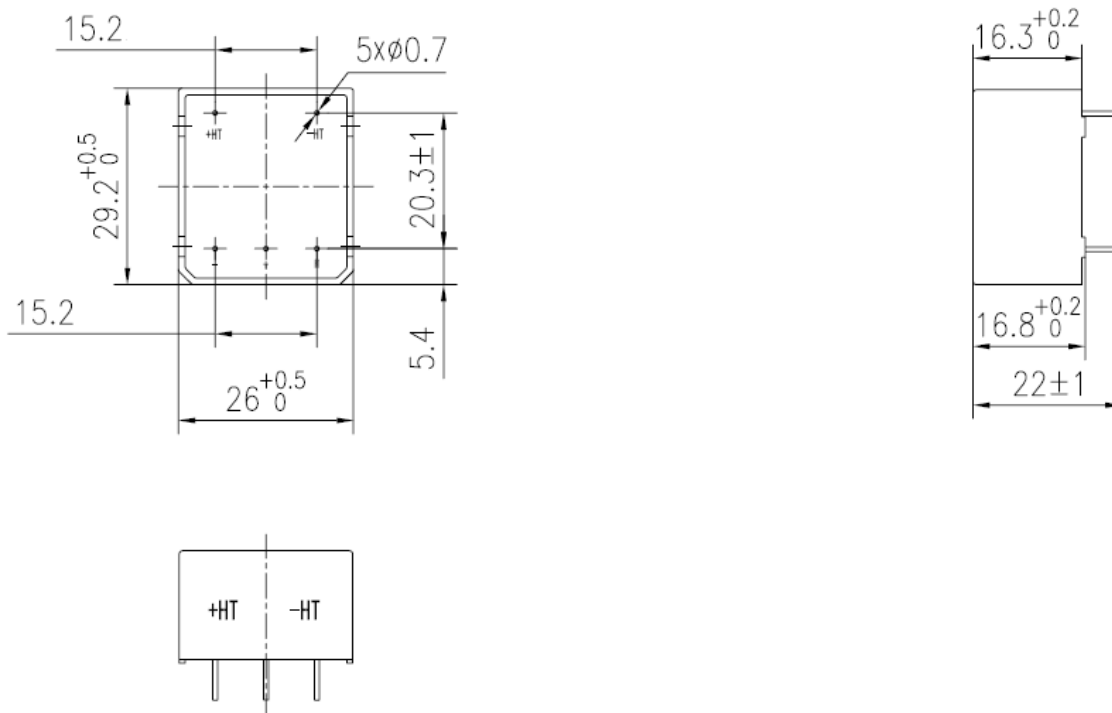
Accuracy - Dynamic performance data		
δ_i (@ I_{PN} , $T_A=25^\circ\text{C}$)	Overall Accuracy	≤±0.8%
δ_L (@ I_{PN} , $T_A=25^\circ\text{C}$)	Linearity error	<0.2%
I_o (@ $I_p=0$, $T_A=25^\circ\text{C}$)	Offset current	≤±0.15mA

I_{OT}	Thermal drift	$\leq \pm 0.5\text{mA}$ (-25°C~+85°C) $\leq \pm 0.8\text{mA}$ (-40°C~+85°C)
t_r	Response time to 90% of I_{PN} step	$\leq 40\mu\text{s}$

General data

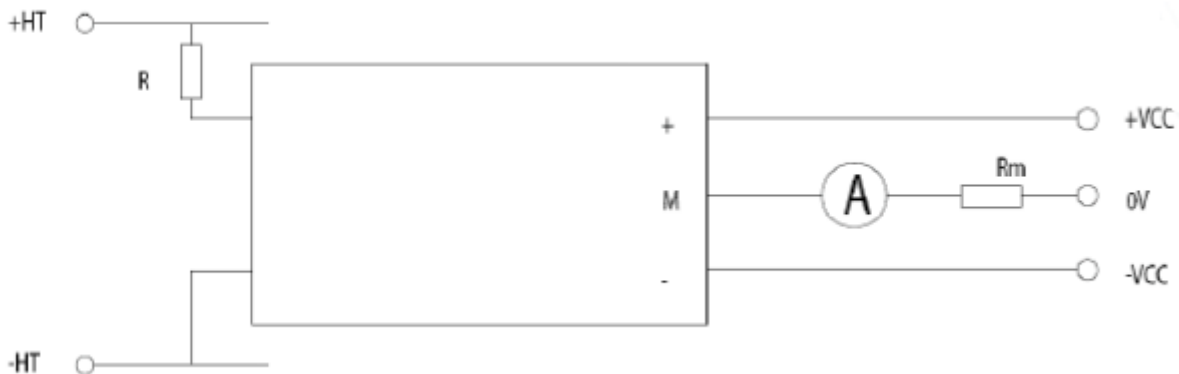
T_a	Ambient operating temperature	-40°C~+85°C
T_s	Ambient storage temperature	-50°C~+90°C
m	Mass	$\leq 22\text{g}$

Dimensions (in mm)



General tolerance: ±0.5mm

Connection

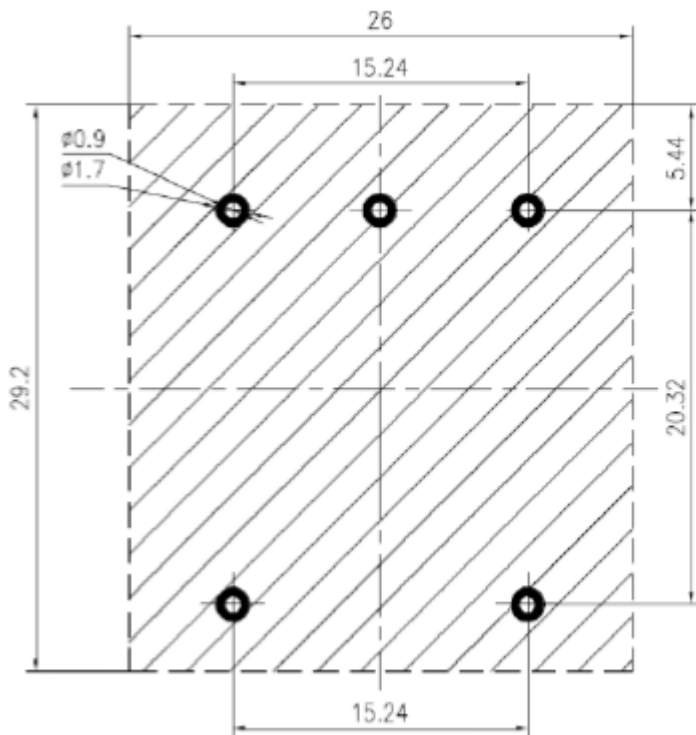


Mechanical characteristics	Remark
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Installation: PCB Soldering

Recommend to encapsulate(unit mm)

General tolerance: ±0.5mm



1. + HT measure the voltage for the timing, the sensor output ISN is positive (ISN by M end to 0 v end)

2. The choice of R, the client through the resistance formula to calculate the value of R. $R = U / 0.01$ A, the formula of U for under test voltage (V).